Recovery Plan Action Status

Plan Name: Okaloosa Darter Plan Status: Final Revision 1

Plan Date: 26-Oct-98 Lead Agency: USFWS

Lead Office: Panama City Ecological Services Field Office 769-0552)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Okaloosa darter (Etheostoma okaloosae)	2	1.1.1.1	Abate erosion program on Eglin A113.	Partially Complete	FY 1995 - FY 1999		Jackson Guard Natural Resource Branch of Eglin Air Force Base	Management: Habitat Maintenance and Manipulation	Internal Field Assistance	
Okaloosa darter (Etheostoma okaloosae)	2	1.1.1.2	Control road access on Eglin AFB	Partially Complete	FY 1995 - FY 1999		Jackson Guard Natural Resource Branch of Eglin Air Force Base	Management: Land Use	Internal Field Assistance, Internal Technical Assistance	Four road-stream crossings were eliminated in FY09
Okaloosa darter (Etheostoma okaloosae)	2	1.1.1.3	Widen riparian buffers in open ranges of Eglin AFB	Partially Complete	FY 1995 - FY 1999		Jackson Guard Natural Resource Branch of Eglin Air Force Base	Management: Habitat Maintenance and Manipulation	Internal Field Assistance	
Okaloosa darter (Etheostoma okaloosae)	2	1.1.1.4	Use road BMPs on Eglin	Ongoing Current	FY 1995 - FY 1999		Jackson Guard Natural Resource Branch of Eglin Air Force Base	Management: Habitat Maintenance and Manipulation	Internal Field Assistance, Internal Technical Assistance	Road BMP's were improved on approximately 40 miles of unpaved roads on Eglin AFB
Okaloosa darter (Etheostoma okaloosae)	2	1.2.1	Stabilize headwater banks on Golf Course	Not Started			Jackson Guard Natural Resource Branch of Eglin Air Force Base	Work type not yet selected	Labor type not yet selected	
Okaloosa darter (Etheostoma okaloosae)	2	1.2.2	Remove impediments to flow in Mill Creek	Partially Complete	FY 1995 - FY 1999	FY 2007	U.S. Army Corps of Engineers, Jackson Guard Natural Resource Branch of Eglin Air Force Base , Okaloosa County , Walton County	Management: Habitat Maintenance and Manipulation	Internal Field Assistance, Internal Technical Assistance	
Okaloosa darter (Etheostoma okaloosae)	1	1.2.3	Minimize use of contaminants on Golf Course	Ongoing Current	FY 1995 - FY 1999		Jackson Guard Natural Resource Branch of Eglin Air Force Base	Management: Habitat Maintenance and Manipulation	Internal Field Assistance	
Okaloosa darter (Etheostoma okaloosae)	2	1.2.4	Create open channel in Mill Creek	Partially Complete	FY 1995 - FY 1999	FY 2007	Jackson Guard Natural Resource Branch of Eglin Air Force Base	Management: Habitat Maintenance and Manipulation, Research: Habitat Status, Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance	

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Okaloosa darter (Etheostoma okaloosae)	2	1.3.1	Evaluate and restore EGLIN AFB ponds	Ongoing Current	FY 1995 - FY 1999		U.S. Geological Survey, Biological Resources Division, Jackson Guard Natural Resource Branch of Eglin Air Force Base	Research: Habitat Status	Internal Field Assistance, Internal Technical Assistance	Three recreational impoundments were eliminated and restored. One other in design, construction in FY10.
Okaloosa darter (Etheostoma okaloosae)	2	1.3.2	Evaluate and modify College Pond spillway	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Geological Survey, Biological Resources Division, Florida Department of Transportation, City of Niceville, Okaloosa County, Walton County		Labor type not yet selected	
Okaloosa darter (Etheostoma okaloosae)	2	1.4.	Include habitat conservation and restoration measures in Natural Resource Management Plan	Complete	FY 1995 - FY 1999	FY 2000 - FY 2004	U.S. Fish and Wildlife Service, Ecological Services Division, Jackson Guard Natural Resource Branch of Eglin Air Force Base	Management: Planning, Other	Internal Technical Assistance	Eglin INRMP annual update included modified objectives for Okaloosa darter
Okaloosa darter (Etheostoma okaloosae)	3	1.5	Prepare catastrophe response plan	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Geological Survey, Biological Resources Division, Jackson Guard Natural Resource Branch of Eglin Air Force Base	Work type not yet selected	Labor type not yet selected	
Okaloosa darter (Etheostoma okaloosae)	2	1.6	Review BMPs for roadways outside of Eglin	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Florida Department of Transportation, City of Niceville, Okaloosa County, City of Valparaiso, Walton County		Labor type not yet selected	

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Okaloosa darter (Etheostoma okaloosae)	2	1.7	Include conservation actions in comprehensive plans	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, City of Niceville, Okaloosa County, City of Valparaiso, Walton County	Work type not yet selected	Labor type not yet selected	
Okaloosa darter (Etheostoma okaloosae)	3	1.8	Initiate cooperative agreements with private landowners	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Department of Agriculture	Management	Internal Field Assistance, Internal Technical Assistance	
Okaloosa darter (Etheostoma okaloosae)	2	2.1	Address water quality and quantity to Natural Resources Plans at Eglin	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Geological Survey, Biological Resources Division, Jackson Guard Natural Resource Branch of Eglin Air Force Base	Management: Planning, Other	Internal Technical Assistance	Physiological response of fishes to sprayfield effluent study completed. FWS Flex funding FY08
Okaloosa darter (Etheostoma okaloosae)	2	2.2	Establish protective water quality criteria	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Florida Department of Environmental Protection	Work type not yet selected	Labor type not yet selected	
Okaloosa darter (Etheostoma okaloosae)	1	2.3	Establish consumptive use permit agreements.	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Northwest Florida Water Management District	Work type not yet selected	Labor type not yet selected	
Okaloosa darter (Etheostoma okaloosae)	2	3.1.1	Monitor darter populations	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Florida Game and Fresh Water Fish Commission, U.S. Geological Survey, Biological Resources Division, Jackson Guard Natural Resource Branch of Eglin Air Force Base, State University System	Research: Habitat Status, Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance, Species Expert	USFWS, USGS, and Loyola University regular annual monitoring.

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Okaloosa darter (Etheostoma okaloosae)	2	3.1.2	Monitor darters at habitat restoration sites	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Geological Survey, Biological Resources Division, Jackson Guard Natural Resource Branch of Eglin Air Force Base	Research: Habitat Status, Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance, Species Expert	Will continue to assess Okaloosa darter response to restored stream habitat.
Okaloosa darter (Etheostoma okaloosae)	2	3.1.3	Analyze habitat by GIS	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Geological Survey, Biological Resources Division, Jackson Guard Natural Resource Branch of Eglin Air Force Base	Use, Research:	Contract, Internal Field Assistance, Internal Technical Assistance, Species Expert	GIS models were developed that predict aquatic habitat condition from landuse characteristics, changes in stream channel geomorphology resulting from erosion control activities.
Okaloosa darter (Etheostoma okaloosae)	2	3.2.2	Inventory of pollutants on Eglin	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Jackson Guard Natural Resource Branch of Eglin Air Force Base	Research: Environmental Contaminants	Internal Field Assistance, Internal Technical Assistance	Water quality analysis of Turkey- Bolton and Long Creeks revealed impaired water quality in Turkey- Bolton Cr.
Okaloosa darter (Etheostoma okaloosae)	2	3.2.3	Maintain status and trends of water quality	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, Florida Department of Environmental Protection, Jackson Guard Natural Resource Branch of Eglin Air Force Base , Okaloosa County , Walton County	Research: Habitat Status	Internal Field Assistance, Internal Technical Assistance	Concurrent with annual darter population monitoring
Okaloosa darter (Etheostoma okaloosae)	2	3.3.1	Continue groundwater monitoring	Ongoing Current	FY 1995 - FY 1999		U.S. Geological Survey, Northwest Florida Water Management District, Jackson Guard Natural Resource Branch of Eglin Air Force Base	Research: Environmental Contaminants, Research: Habitat Status	Internal Field Assistance, Internal Technical Assistance	

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Okaloosa darter (Etheostoma okaloosae)	2	3.3.2	Reestablish surface water flow monitoring	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Geological Survey, Northwest Florida Water Management District, Jackson Guard Natural Resource Branch of Eglin Air Force Base	Work type not yet selected	Labor type not yet selected	
Okaloosa darter (Etheostoma okaloosae)	2	3.4	Assess darter recovery annually	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Geological Survey, Biological Resources Division, Jackson Guard Natural Resource Branch of Eglin Air Force Base	Management: Planning	Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	Okaloosa darter recovery team meeting scheduled for FY09 postponed.
Okaloosa darter (Etheostoma okaloosae)	3	4.1	Prepare public education fact sheet on darter	Complete	FY 1995 - FY 1999	FY 2000 - FY 2004	U.S. Fish and Wildlife Service, Ecological Services Division, Florida Game and Fresh Water Fish Commission, U.S. Geological Survey, Biological Resources Division, Jackson Guard Natural Resource Branch of Eglin Air Force Base, City of Niceville, Okaloosa County, State University System, City of Valparaiso, Walton County	Other: Information and Education	Contract	
Okaloosa darter (Etheostoma okaloosae)	3	4.2	Summarize BMPs for golf course operations	Unknown			U.S. Fish and Wildlife Service, Ecological Services Division, Jackson Guard Natural Resource Branch of Eglin Air Force Base	Work type not yet selected	Labor type not yet selected	

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Okaloosa darter (Etheostoma okaloosae)	3		Remind involved agencies to incorporate recovery actions into local planning activities	Planned	FY 1995 - FY 1999		Wildlife Service, Ecological Services	Planning, Other: Information and	Internal Field Assistance, Internal Technical Assistance	